

Phase II Storm Water Developments

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**CURRENT DEVELOPMENTS IN THE STATE OF INDIANA
REGARDING PHASE II OF
THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
STORM WATER PROGRAM**

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BACKGROUND

Significant progress has been made in controlling water pollution since the 1972 amendments to the Clean Water Act (CWA) authorized the National Pollutant Discharge Elimination System (NPDES) program. Most of the progress to date has come from controlling industrial wastewater and municipal sewage discharges. However, studies on water quality show that pollution from diffuse sources such as runoff from agriculture, urban areas, and construction sites is still causing water quality impairments. To address this problem, the 1987 CWA amendments required the United States Environmental Protection Agency (USEPA) to publish regulations to control storm water discharges under the NPDES program. These regulations, considered Phase I of a two-phased approach, were published on November 16, 1990. Facilities with a "storm water discharge associated with industrial activity" were required to apply for a permit. Discharges from municipal separate storm sewer systems (MS4s) serving a population of 100,000 or more have also been regulated. The State of Indiana was delegated by the USEPA to regulate the NPDES program. Therefore, the State of Indiana developed its own Storm Water regulations, which match the federal regulations in the definition of "storm water discharge associated with industrial activity". On December 8, 1999, USEPA published the final rule, which implemented Phase II of the NPDES Storm Water program. This paper will discuss when the State of Indiana will implement the Phase II regulations, who will need to apply for Phase II permit coverage, and what requirements will be in those permits.

WHEN DOES PHASE II TAKE EFFECT?

The final Phase II rule was published in the Federal Register (40 CFR Parts 9, 122, 123, and 124) on December 8, 1999. Since the State of Indiana is the NPDES permitting authority for the State, the Indiana Department of Environmental Management (IDEM) is required to issue general permits for Phase II regulated small MS4s and construction activity by December 8, 2002. The State must also revise the existing State Storm Water Regulations by December 8, 2002. Therefore, until the State amends the Indiana Administrative Code, Phase II can not take effect in Indiana.

WHO IS REQUIRED TO APPLY AND WHAT ARE THE REQUIREMENTS?

The State regulations for Storm Water, 327 IAC 5-4-6, address the three main categories of regulated dischargers: industrial, construction, and municipal. Two NPDES general permit rules were developed to help in the industrial and construction permitting process: Storm Water Discharge Associated With Industrial Activity, 327 IAC 15-6 (Rule 6), and Storm Water Runoff

Associated with Construction Activity, 327 IAC 15-5 (Rule 5). These State general permit rules contain the storm water discharge permit requirements.

1) **Industrial Storm Water Discharge Permits:** to determine whether an application is required for an industrial storm water discharge permit, three questions need to be answered. If the answer to any of these questions is no, then an industrial storm water permit application is not required at this time under the current Phase I regulations.

- a) Is the facility identified in any of the categories of industries “involved in industrial activity as defined in 327 IAC 15-6-4(2)(A-J)? This is determined primarily by the facility’s Standard Industrial Classification (SIC) Code. If the facility’s SIC Code is listed or if the facility meets one of the narrative descriptions, it is required to apply for permit coverage.
- b) Are there any discharges of storm water “associated with industrial activity” as defined in 327 IAC 15-6-4(2)? This is storm water runoff from areas related to manufacturing, materials, storage, shipping/receiving, etc. Facilities listed in category ‘J’ (which are not otherwise included under categories ‘B-I’) only need to apply when storm water is potentially exposed to industrial activity (i.e. if there is no exposure of materials or activities listed in the definition). This is also referred to as the “No Exposure” Exemption. All other facilities must submit a permit application regardless of the actual exposure of materials or activities to storm water.
- c) Does the storm water associated with industrial activity discharge through a municipal separate storm sewer system or result in a point source discharge to a surface water of the State? The definition of point source (found in 327 IAC 5-1.5-40) is broad. It includes any discernible, confined, and discrete conveyance, such as a pipe, ditch, channel, tunnel, conduit, or discrete fissure. Discharges into combined or sanitary sewer systems are not regulated by these rules. Discharges into groundwater are regulated only when there is a known hydrological connection to a nearby surface water.

◆Under Phase II, all industrial categories listed in the existing storm water regulations will be able to seek the **No Exposure Exemption**. These facilities will be required to submit a “No Exposure Certification” form every five years certifying that the facility meets the no exposure requirements. This also includes facilities that are not currently permitted based on a claim of no exposure. At this time, IDEM is encouraging facilities who are not currently permitted and qualify for the No Exposure Exemption to voluntarily submit USEPA’s No Exposure Certification since they will be required to do this under Phase II. Facilities who have previously submitted paperwork will be notified first when the State regulations change. Also, the facility should keep copies of this paperwork at the facility in case they are inspected.

2) **Construction Storm Water Discharge Permits:** construction activities (designated as storm water discharges associated with other activity) including clearing, grading, and excavating activities that result in land disturbance of five (5) acres or more are regulated under the current Phase I regulations.

◆ Under Phase II, the storm water program will be extended to include construction activities that result in land disturbance of equal to or greater than **one (1) acre and less than five (5) acres**. Sites less than one acre which are part of a larger common plan of development or sale with a planned disturbance of 1 or more acres are also included. The permitting authority may also designate activities disturbing less than 1 acre based on potential for contribution to a violation of a water quality standard or for significant contribution of pollutants to waters of the State.

Storm water discharges from facilities exempted by the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 (industrial or construction activities owned or operated by a municipality with a population of less than 100,000) will be required to submit a permit application by March 10, 2003.

3) **Municipal Separate Storm Sewer System (MS4) Storm Water Discharge Permits:** an MS4 is defined as a conveyance or system of conveyances... owned by a state, city, town, or other public entity that discharges to waters of the U.S. and is:

- Not a combined sewer
- Designed or used for collecting or conveying storm water
- Not part of a Publicly Owned Treatment Works (POTW)

Therefore, an MS4 is not necessarily merely a system of underground pipes. It can also include roads with drainage systems, gutters, and ditches.

Under Phase I, the only municipality in the State of Indiana required to obtain an MS4 permit was the City of Indianapolis. This type of permit is an individual NPDES permit specifically written and developed for the City.

◆ Under Phase II, The municipal storm water program will be extended to include: 1) **small MS4s within Aurbanized areas@**, 2) **small MS4s meeting criteria to be established by the permitting authority for designation (permitting authority will be required to evaluate some small MS4s outside urbanized areas)**, and 3) **any MS4 contributing substantially to the storm water pollutant loadings of a regulated, physically interconnected MS4**. USEPA strongly recommends that general permits be used for municipal sources, and that they be issued on a watershed basis. Individual permits may also be issued as well as modification of existing Phase I permits to include co-permittees. These permits must be issued by March 10, 2003 and by the end of their first permit terms (typically 5 years) operators of regulated small MS4s will have to fully implement their Storm Water Management Programs. The following briefly explains the three above-mentioned categories (note that the following list does not include the four medium MS4s that were exempt from Phase I based on population served by combined sewers, which would now be considered small MS4s: ***Evansville, Fort Wayne, Gary and South Bend***:

1. Small MS4s located in an incorporated place or county within an Aurbanized area@ (defined as a central place or places or the core and the adjacent densely settled surrounding territory or fringe that together have a minimum population of 50,000 and a minimum average density of 1,000/sq mi.) are automatically designated as regulated small MS4s. *There are 93 incorporated places and*

counties listed in Indiana proposed to be automatically designated (this includes the four excluded cities in Indianapolis of Beech Grove, Lawrence, Speedway, and Southport).

2. NPDES permitting authorities will be required to develop a process, as well as criteria, to designate MS4s, which would be applied, at a minimum, to all MS4s located outside of an urbanized area with a population of at least 10,000 and a population density of at least 1,000. *There are 28 incorporated places and counties in Indiana listed as potentially designated upon evaluation.* EPA has developed recommended criteria to be applied to these small MS4s.
3. NPDES permitting authorities would be required to designate any owner or operator of a MS4 that contributes substantially to the storm water pollutant loadings of a physically interconnected MS4 that is regulated by the NPDES storm water program.

Waivers may be granted in cases where the jurisdiction served by the regulated small MS4 includes a population of less than 1,000 persons, its discharges are not contributing substantially to the storm water pollutant loadings of a physically interconnected regulated MS4, and the owner or operator of the small MS4 has certified that storm water controls are not needed based on: (1) wasteload allocations that are part of Total Maximum Daily Load Programs (TMDLs) that address the pollutants of concern, or (2) a comprehensive watershed plan, implemented for the waterbody.

The storm water permit will require the municipality to develop a program to reduce the discharge of pollutants and protect water quality. The program must include the following **Six (6) Minimum Control Measures:**

- ① **Public Education and Outreach:** distributing educational materials and performing outreach to inform citizens about the impacts polluted storm water runoff discharges can have on water quality.
- ② **Public Participation/Involvement:** providing opportunities for citizens to participate in program development and implementation, including effectively publicizing public hearings and/or encouraging citizen representatives on a storm water management panel.
- ③ **Illicit Discharge Detection and Elimination:** developing and implementing a plan to detect and eliminate illicit discharges to the storm sewer system (includes developing a system map and informing the community about hazards associated with illegal discharges and improper disposal of waste).
- ④ **Construction Site Runoff Control:** developing, implementing, and enforcing an erosion and sediment control program for construction activities that disturb one (1)

or more acres of land (controls could include silt fences and temporary storm water detention ponds).

- ⑤ **Post Construction Runoff Control:** developing, implementing, and enforcing a program to address discharges of post-construction storm water runoff from new development and redevelopment areas. Applicable controls could include preventative actions such as protecting sensitive areas (e.g. wetlands) or the use of structural best management practices (BMPs) such as grassed swales or porous pavement.
- ⑥ **Pollution Prevention/Good Housekeeping:** developing and implementing a program with the goal of preventing or reducing pollutant runoff from municipal operations. The program must include municipal staff training on pollution prevention measures and techniques (e.g., regular street sweeping, reduction in the use of pesticides or street salt, or frequent catch-basin cleaning).

In the next two years, USEPA is obligated to issue a model, general permit, guidance on measurable goals and issue a menu of recommended BMPs for regulated small MS4s. The State of Indiana anticipates it will adopt a general MS4 permit and the USEPA guidances.

CONCLUSION

The new Phase II Storm Water Regulations will be implemented by The State of Indiana in the next two years. The expected benefits of this program includes enhanced fishing, enhanced opportunities for recreation, reduced potential for flood damage, drinking water benefits, and enhanced aesthetic value. There are several programmatic innovations, which offer regulatory flexibility. For example, the MS4 program encourages partnerships with other entities to satisfy the minimum measures. This program also allows the State to grant waivers from permit coverage. IDEM is committed to offering information, training, and technical assistance to permittees.

REFERENCES

1. USEPA, 1999. Storm Water Phase II Fact Sheet Series 1-4. April 1999. EPA 833-F-99-001 through 015.
2. USEPA, 1999. 40 CFR Parts 9, 122, 123, and 124; National Pollutant Discharge Elimination System—Proposed Regulations for Revision of the Water Pollution Control Program Addressing Storm Water Discharges; Final Rule. Wednesday December 8, 1999. 64 FR 235
3. USEPA, 2000. 7th National Storm Water Coordinators' Meeting Materials and Notes. January 2000.
4. IDEM, 1998. Summary of Phase II Storm Water Regulations. September 1998.